

UROGENITAL ATROPHY

David Sturdee on behalf of the British Menopause Society Council (Updated from the previous guidelines by Joan Pitkin and Margaret Rees in 2008)

Summary

The British Menopause Society Council aims to aid health professionals in providing up to date and informed advice about post reproductive health. This guidance refers to the long term, but often ignored condition of urogenital atrophy resulting from postmenopausal estrogen deficiency. Treatment should be based on up to date information and targeted to the needs of the individual woman. Non-estrogen and estrogen containing treatments are discussed.

Introduction

Unlike hot flushes which resolve spontaneously in time, atrophic symptoms affecting the vagina and lower urinary tract are often progressive, lasting for many years and frequently require treatment. The prevalence of vaginal dryness increases as a woman advances through the postmenopausal years, causing itching, burning, and dyspareunia, and sexual activity is often compromised. While up to 40% of women will experience symptoms at some time, only a minority (about 25% in the Western world) will seek medical help. Some of this is due to lack of education about what women might expect after the menopause but also to the adverse publicity for hormone replacement therapy(HRT) and the mistaken belief that local treatment of vaginal atrophy is similar to HRT. Other reasons for the continued suffering in silence may be cultural and an understandable reluctance to discuss such matters, but the medical profession must also take much of the blame for failing to enquire of all postmenopausal women about the possibility of vaginal atrophic symptoms [1].

Pathophysiology

Estrogen receptors are present in the vagina, urethra and bladder trigone and with the decline in circulating estradiol after the menopause, there is inevitably some degree of atrophic change in these areas. In particular the vaginal epithelium becomes thin and loses its rugae and elasticity and is visibly paler due to the reduced blood supply, though when symptomatic the introitus may appear acutely inflamed and tender. There is reduced glycogen in the superficial cells causing an increased pH due to lower production of lactic acid, which reduces resistance to the growth of pathogens. Cervical secretions and vaginal transudation are also decreased leading to reduced lubrication. Atrophic urethritis and trigonitis can cause dysuria, frequency, urgency, bladder pain and recurrent urinary infections. Atrophy of the vulval skin and labia may contribute to pruritus.

Treatment

Symptomatic urogenital atrophy is easy to diagnose, but too often it is missed or not presented. Simple questioning of all postmenopausal women, regardless of the initial reason for consulting, will elicit the classic symptoms. The principles of treatment of established vaginal atrophy are the restoration of urogenital physiology and the alleviation of symptoms. Treatment should be started early and before irrevocable changes have occurred [1].

Non-hormonal lubricants and moisturisers

Lubricants and moisturisers are available without prescription, though can be expensive; some can be prescribed (Replens, Sylk, Hyalofemme and Regelle). These are mainly a combination of protectants and thickening agents in a water-soluble base, and are primarily of use to relieve vaginal dryness during intercourse, but do not provide a long-term solution or restore urogenital physiology [2,3]. Moisturisers can help to retain water in the superficial cells of the vagina and thus have some longer effects.

The integrity and efficacy of condoms may be compromised by lubricants such as petroleum based products and baby oil. This can be important when condoms are used to prevent sexually transmitted infections [4].

Estrogen

Estrogen may be given either systemically or locally, but 10-25% of women using systemic hormone therapy alone will still experience the symptoms of urogenital atrophy. This finding plus the safety concerns about oral/transdermal HRT are the reasons why systemic therapy is not usually recommended for women with vaginal symptoms only [5], though, in women with severe symptoms, a combination of systemic and vaginal estrogen may be necessary initially [1]. Local therapy options include low dose natural estrogens such as estradiol by tablet or ring, or estriol by cream or pessary. Conjugated equine estrogen cream is no longer used as it tends to be absorbed more readily into the circulation and has caused endometrial stimulation and bleeding [6]. Systemic absorption occurs with all topical estrogen preparations but is low with estradiol vaginal tablets or ring and hormone levels remain within the normal postmenopausal range [7,8]. Absorption is greatest during the first few days, when the vaginal epithelium is still atrophic. Once it has matured, absorption decreases and smaller doses of estrogen will prevent recurring atrophy, which needs to be continued indefinitely. Considerable absorption of estriol is seen from both creams and pessaries but, since estriol is a weak estrogen, which is not converted to estrone or estradiol, systemic effects are limited [9]. There is no evidence of endometrial stimulation when estradiol or estriol preparations are used appropriately and thus there is no need for additional progestogen for endometrial protection [1,6,10,11]. However, if unexpected postmenopausal bleeding does occur this should be investigated.

All estrogen preparations have a beneficial effect on urogenital atrophy, relieving vaginal dryness, dyspareunia and reducing urinary infections. Tablets and rings cause less discharge compared to pessaries and creams. Individual patient preference will determine the choice of product[6]. There are no studies of the use of local estrogen beyond 12 months, but long-term use of low-dose estrogen is not contra-indicated [1]. It is regrettable that 60% of British postmenopausal women are unaware of the availability and effects of local estrogen and fewer receive prescriptions than women in Scandinavia and North America [12].

In the presence of urogenital atrophy, the changes in the cervix can cause cervical smears to be unsatisfactory for assessment. The squamo-columnar junction may recede into the cervical canal making colposcopic examination unsatisfactory also. The use of local estrogen for a few weeks can resolve these problems.

Vaginal atrophy is a common result of the treatment of many gynaecological and breast cancers but, there are insufficient data on the use of local estrogen in women with hormone-responsive cancers to provide an evidence-based guidance. Use of local estrogen therapy in women on tamoxifen or aromatase inhibitors needs careful counselling and discussion with the oncology team [1].

Future

Ospemifene, an orally active selective estrogen receptor modulator (SERM) has been licensed in N America for the treatment of urogenital atrophy and may become available in the UK soon [13].

Practice points

- Symptoms due to urogenital atrophy are common but are under-recognised and under-treated by healthcare professionals
- Treatment should be started early and before irrevocable changes have occurred
- Treatment needs to be continued to maintain the benefits
- All local estrogen preparations are effective and patient preference will usually determine the treatment used
- Additional progestogen is not indicated when appropriate low-dose local estrogen is used
- If estrogen is ineffective or undesired, vaginal moisturizers and lubricants can give temporary relief from symptoms due to vaginal dryness

References

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